IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

GREEN et al.

Commissioner for Patents

Alexandria, VA 22313-1450

PO Box 1450

Appl. No.: 10/069,626

Filed: July 25, 2002

Treatment Methods Using Human

B Lymphocyte Activation Antigen

B7 Family Members

Confirmation No.: 3311

Art Unit: 1644

Examiner:

Ilia I. Ouspenski

Atty. Docket: 2159.0960004/EKS/PAC

Information Disclosure Statement Under 37 C.F.R. § 1.97(c)

Mail Stop Amendment 03/22/2006 SZEWDIE1 00009105 10069626

01 FC:1806

189.09 OP

11,4

Sir:

Listed on accompanying IDS Forms, PTO/SB/08A and PTO/SB/08B, are documents that may be considered material to the examination of this application, in compliance with the duty of disclosure requirements of 37 C.F.R. §§ 1.56, 1.97 and 1.98. A copy of each document is provided.

Applicants' would like to bring to the attention of the Examiner that, for the following document, the publication month could not be determined to the best of the Applicants' ability: NPL6, Greenfield, E.A., et al., "CD28/B7 Costimulation: A Review," Crit. Rev. Immunol. 18:389-418, Begell House, Inc. (1998).

Where the publication date of a listed document does not provide a month of publication, the year of publication of the listed document is sufficiently earlier than the effective U.S. filing date and any foreign priority date so that the month of publication is not in issue. Applicants have listed publication dates on the attached IDS Forms based on information presently available to the undersigned. However, the listed publication dates should not be construed as an admission that the information was actually published on the date indicated.

Applicants reserve the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may not be prior art, and/or to prove that this information may not be enabling for the teachings purportedly offered.

This Information Disclosure Statement is being filed more than three months after the U.S. filing date AND after the mailing date of the first Office Action on the merits, but before the mailing date of a Final Rejection, or Notice of Allowance, or an action that otherwise closes prosecution in the application. Attached is our PTO-2038 Credit Card Payment Form in the amount of \$180.00 in payment of the fee under 37 C.F.R. § 1.17(p).

It is respectfully requested that the Examiner initial and return a copy of the enclosed IDS Forms, and indicate in the official file wrapper of this patent application that the documents have been considered.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Paul A. Calvo

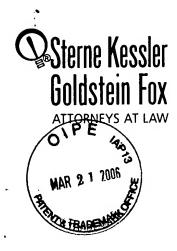
Agent for Applicants Registration No. 57,913

Date:

3/21/2006

1100 New York Avenue, N.W. Washington, D.C. 20005-3934 (202) 371-2600

506994v1



Robert Greene Sterne Jorge A. Goldstein David K.S. Cornwell Robert W. Esmond Tracy-Gene G. Durkin Michael B. Ray Robert E. Sokohl Eric K. Steffe Michael Q. Lee Steven R. Ludwig John M. Covert Linda E. Homer Robert C. Millonig Donald J. Featherstone Timotthy J. Shea, Jr Michael V. Messinger Judith U. Kim Patrick E. Garrett
Jeffrey T. Helvey
Heidi L. Kraus
Eldora L. Ellison
Thomas C. Fiala
Donald R. Banowit
Peter A. Jackman
Jeffrey S. Weaver
Brian J. Del Buono
Edward Yee
Vincent L. Capuano
Virgil Lee Beaston
Theodore A. Wood
Elizabeth J. Haanes
Joseph S. Ostroff
Frank R. Cottingham
Rae Lynn P. Guest
Daniel A. Klein

Jason D. Eisenberg Michael D. Specht Tracy L. Muller Jon E. Wright LuAnne M. DeSantis Ann E. Summerfield Helene C. Carlson Cynthia M. Bouchez Timothy A. Doyle Gaby L. Longsworth Lori A. Gordon Ted J. Ebersole Laura A. Vogel Bryan S. Wade Bashir M.S. Ali Shannon A. Carroll Matthew E. Kelley Michelle K. Holoubek*

berg Marsha A. Rose*
echt W. Blake Coblentz*
f James J. Pohl*
John T. Haran*
Mark W. Rygiel
stentield
ston Registered Patent Agents*
uuchez Karen R. Markowicz
Worth Katrina Yujian Pei Quach
n Bryan L. Skelton
e Robert A. Schwartzman
I Teresa A. Colella
Victoria S. Rutherford
i Simon J. Elliott
arroll Julie A. Heider
elley Mita Mukherjee
Scott M. Woodhouse

Christopher J. Walsh Liliana Di Nola-Baron Peter A. Socarras Jeffrey K. Mills Danielle L. Letting Lori Brandes

Of Counsel Edward J. Kessler Kenneth C. Bass III Marvin C. Guthrie

*Admitted only in Maryland *Admitted only in Virginia •Practice Limited to Federal Agencies

March 21, 2006

WRITER'S DIRECT NUMBER: (202) 772-8846
INTERNET ADDRESS: PCALVO@SKGF.COM

Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450 Art Unit 1644

Attn: Mail Stop Amendment

Re:

U.S. Utility Patent Application

Application No. 10/069,626; Filed: July 25, 2002

For:

Treatment Methods Using Human B Lymphocyte

Activation Antigen B7 Family Members

Inventors:

GREEN et al.

Our Ref:

2159.0960004/EKS/PAC

Sir:

Transmitted herewith for appropriate action are the following documents:

- 1. Information Disclosure Statement;
- 2. One page of Form PTO/SB/08A listing two documents (FP1 and FP2);
- 3. Two pages of Form/PTO/SB/08B listing 17 documents (NPL1-NPL17);
- 4. Copies of documents FP1, FP2 and NPL1-NPL17 as listed on Forms PTO/SB/08A and PTO/SB/08B;
- 5. Credit Card Payment Form (PTO-2038) in the amount of \$180.00 to cover the Information Disclosure Statement Fee; and
- 6. Return postcard.

It is respectfully requested that the attached postcard be stamped with the date of filing of these documents, and that it be returned to our courier. In the event that extensions of time are necessary to prevent abandonment of this patent application, then such extensions of time are hereby petitioned.

Sterne, Kessler, Goldstein & Fox P.L.C.: 1100 New York Avenue, NW: Washington, DC 20005: 202.371.2600 f 202.371.2540: www.skgf.com

Commissioner for Patents March 21, 2006 Page 2

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Paul A. Calvo

Agent for Applicants Registration No. 57,913

aul A. Calio

EKS/PAC/dbj Enclosures

509838_1.DOC

Sterne, Kessler, Goldstein & Fox PLLC. : 1100 New York Avenue, NW : Washington, DC 20005 : 202.371.2600 f 202.371.2540 : www.skgf.com

Equivalent of Form PTO/SB/08A (07-05)
Approved for use through 07/31/2006.
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Attorney Docket Number

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

m 1449/PTO

of

Sheet

Application Number 10/069,626

Filing Date July 25, 2002

First Named Inventor Cynthia GREEN

Art Unit 1644

Examiner Name Ilia I. Ouspenski

2159.0960004/EKS/PAC

Complete if Known

Examiner Initials No. Document Number Number-Kind Code^{2 (If Koown)}

| Document Number-Kind Code^{2 (If Koown)} | Publication Date MM-DD-YYYY | Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear

		Fo	REIGN PATENT DO	DCUMENTS		
Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ Number ⁴ Kind Code ³ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
	FP1	WO 99/46281 A2	09/16/1999	Genentech, Inc.		\Box
	FP2	WO 00/68266 A1	11/16/2000	Eli Lilly and Company		
						$\vdash\vdash$

Examiner	1	Date	
4	1	Date	
Signatura	1		
Signature	1	Considered	
	<u> </u>		

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 'Applicant's unique citation designation number (optional). *See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. *Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). *For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. *Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. *Applicant is to place a check mark here if English language Translation is attached.

English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

PTO/SB/08B (07-05)

Approved for use through 07/31/2006. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

10/069,626

the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number. Continue for form 1449/PTO Complete if Known

MEADMATION DISCLASSIDE

INFORMA	TION	DISC	CLOSUE	E Filing Date	July 25, 2002	2
STATEME	NT BY	/ API	PLICAN	T First Named	Inventor Cynthia GREI	EN
· -			s necessary)	Art Unit	1644	
				Examiner Na	ame Ilia I. Ouspens	ski
Sheet	1	of	2	Attorney Do	cket Number 2159.0960004	/EKS/PAC

Application Number

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume issue number(s), publisher, city and/or country where published	T²
	NPL1	Abbas, A K. and Sharpe, A.H., "T-cell stimulation: an abundance of B7s," <i>Nat. Med.</i> 5:1345-1346, Nature America, Inc. (December 1999)	
	NPL2	Branch, A.D., "A good antisense molecule is hard to find," <i>Trends Biochem. Sci.</i> 23:45-50, Elsevier Science Ltd. (February 1998)	
	NPL3	Chapoval, A.I., et al., "B7-H3: A costimulatory molecule for T cell activation and IFN-γ production," Nat. Immunol. 2:269-274, Nature America, Inc. (March 2001)	
	NPL4	Dong, H., et al., "B7-H1, a third member of the B7 family, co-stimulates T-cell proliferation and interleukin-10 secretion," Nat. Med. 5:1365-1369, Nature America, Inc. (December 1999)	
	NPL5	Freeman, G.J., et al., "Structure, Expression, and T Cell Costimulatory Activity of the Murine Homologue of the Human B Lymphocyte Activation Antigen B7," J. Exp. Med. 174:625-631, The Rockefeller University Press (1991)	٠
	NPL6	Greenfield, E.A., et al., "CD28/B7 Costimulation: A Review," Crit. Rev. Immunol. 18:389-418, Begell House, Inc. (1998)	
	NPL7	Janeway, C.A., et al., eds., "Chapter 7. The Adaptive Immune Response," in: Immunobiology - The Immune System in Health and Disease," 3 rd Ed., Garland Publishing Inc., New York, NY, pp. 7:1-7:44 (1997)	
	NPL8	Ling, V., et al., "Cutting Edge: Identification of GL50, a Novel B7-Like Protein That Functionally Binds to ICOS Receptor," J. Immunol. 164:1653-1657, The American Association of Immunologists (February 2000)	
	NPL9	Linsley, P.S., et al., "Extending the B7 (CD80) gene family," Prot. Sci. 3:1341-1343, Cambridge University Press (1994)	
	NPL10	Mountain, A., "Gene therapy: the first decade," <i>Trends Biotechnol. 18</i> :119-128, Elsevier Science Ltd. (March 2000)	

Examiner		Date	
Signature	q	Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and

not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08B (07-05) Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

deduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number. Substitute for Complete if Known 10/069,626 Application Number INFORMATION DISCLOSURE Filing Date July 25, 2002 First Named Inventor Cynthia GREEN STATEMENT BY APPLICANT Art Unit 1644 (Use as many sheets as necessary) Ilia I. Ouspenski Examiner Name 2159.0960004/EKS/PAC Attorney Docket Number Sheet of 2

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume number, publisher, city and/or country where published	Τ²
	NPL11	Nishimura, Y., et al., "Molecular cloning of the cDNAs encoding the feline B-lymphocyte activation antigen B7-1 (CD90) and B7-2 (CD86) homologues which interact with human CTLA4-Ig," Eur. J. Immunogen. 27:427-430, Blackwell Science Ltd. (December 2000)	
	NPL12	Selvakumar, A., et al., "Genomic organization and chromosomal location of the human gene encoding the B-lymphocyte activation antigen B7," <i>Immunogen</i> . 36:175-181, Springer International (1992)	
	NPL13	Skolnick, J. and Fetrow, J.S., "From genes to protein structure and function: novel applications of computational approaches in the genomic era," <i>Trends Biotechnol</i> . 18:34-39, Elsevier Science Ltd. (January 2000)	
	NPL14	Swallow, M.M., et al., "B7h, a Novel Costimulatory Homolog of B7.1 and B7.2, Is Induced by TNFa," <i>Immunity 11</i> :423-432, Cell Press (October 1999)	
	NPL15	Thompson, C.B., "Distinct Roles for the Costimulatory Ligands B7-1 and B7-2 in T Helper Cell Differentiation?," <i>Cell 81</i> :979-982, Cell Press (1995)	
	NPL16	Voet, S. and Voet, J.G., "3. Chemical Evolution," in: Biochemistry, John Wiley & Sons, New York, NY, pp. 126-230 (1990)	
	NPL17	Zhang, D. and Johnson, R.P., "Molecular Cloning and Comparative Analysis of the Rhesus Macaque Costimulatory Molecules CD80 (B7-1) and CD86 (B7-2)," <i>Cellul. Immunol. 177</i> :9-17, Academic Press (1997)	

506914v1

Examiner	Date	
Signature	Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and

not considered. Include copy of this form with next communication to applicant:

Applicant's unique citation designation number (optional).

Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.